

**BEST AVAILABLE COPY**K-C 18,580  
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**AUG 29 2006****REMARKS**

After entry of this Amendment A and Response After RCE, claims 1-16, 26-42, 52-68, 78-94, and 104 will be pending. Claims 11, 12, 14, 15, 27-42, 52-68, 78, 89, 90, 92, and 93 have been withdrawn as directed to a non-elected invention. Applicants reserve the right to file divisional applications directed to these non-elected claims.

Applicants have amended claims 1 and 79. Specifically, claims 1 and 79 have been amended to require the first and second material to be dissimilar materials that are ultrasonically bonded together. Support for the above amendment can be found in previously presented independent claims 1 and 79 and in the instant specification on page 10, paragraph 23. No new matter has been added by these amendments. Applicants respectfully request reconsideration and allowance of all pending claims.

1. Claims 1-10, 13, 16, 26, 79-88, 91, 94, and 104 are patentable under 35 U.S.C. §102(b) over Zhou et al. (U.S. 2002/0123538A1).

Claim 1 is directed to an article comprising an ultrasonically bonded laminated structure. The laminated structure comprises a first material, a second material, and an adhesive composition. The adhesive composition comprises an atactic polymer and an isotactic polymer. The atactic polymer has a degree of crystallinity of less than about 20% and a number-average molecular weight of from about 1,000 to about 300,000. The isotactic polymer has a degree of crystallinity of at least about 40% and a number-average molecular weight of from

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about 3,000 to about 200,000. The first material and the second material are dissimilar materials and are ultrasonically bonded together. As defined in paragraph 23 of the instant specification, the term "dissimilar" means that the materials have melting temperatures that vary by more than about 40°F, and have dissimilar molecular structures such that upon ultrasonic bonding, the materials are not brought together as one material and typically have macro-phase separation.

Zhou et al. ('538) disclose adhesive compositions comprising selected ratios of crystalline and amorphous polymers. Specifically, one adhesive composition of the invention comprises an atactic polymer having a degree of crystallinity of about 20% or less and a number-average molecular weight of from about 1,000 to about 300,000, and an isotactic polymer having a degree of crystallinity of about 40% or more and a number-average molecular weight of from about 3,000 to about 200,000. One preferred adhesive composition blends a selected amount of isotactic polypropylene with a selected amount of atactic polypropylene.

The '538 reference also discloses methods of making laminated structures and disposable absorbent articles employing the adhesive composition. The laminated structures comprise a first layer and a second layer, wherein at least a portion of the first layer is attached to at least a portion of the second layer using an adhesive composition. The first layer, second layer, or both may comprise a variety of materials including a nonwoven, a film, a woven material, an elasticized component, or a substrate comprising cellulosic material, thermoplastic material, or both. Examples of materials or webs bonded together by the adhesive to form the laminated structures of

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'538 include necked-bonded laminates (NBL)<sup>1</sup>, polypropylene, spunbonded layers, stretched-bonded laminates (SBL)<sup>2</sup>, and an outer cover comprising a polyethylene layer and a polypropylene, spunbonded layer.<sup>3</sup> Additionally, the '538 reference discloses that the resulting laminated materials may be exposed to ultrasonic energy.

The '538 reference, however, fails to disclose a laminated structure comprising an adhesive, a first material and a second material, wherein the first and second materials are dissimilar materials that are ultrasonically bonded together. As noted above, "dissimilar" means that the materials have melting temperatures that vary by more than about 40°F and have dissimilar molecular structures. These are requirements of claim 1 and are significant aspects of Applicants' invention.

In the Response to Arguments section of the final Office action, the Office asserts that Applicants' argument that '538 fails to disclose a laminated structure comprising an adhesive, a first material and a second material, wherein the first and second material are dissimilar materials is not persuasive as '538 teaches a composition that may be utilized to bond two materials together wherein the two materials may be the same or different than each other.<sup>4</sup> While the reference does disclose that the materials comprising the laminate may be "different," Applicants respectfully assert that '538 does not teach a first

<sup>1</sup> As defined in '538, a necked-bonded laminate substrate (NBL) generally comprises a polyethylene layer sandwiched between two polypropylene, spunbonded layers. Paragraph 59.

<sup>2</sup> As defined in '538, a stretch-bonded laminate (SBL) generally comprises an elongated elastic web or elastomeric strands bonded between two spunbonded layers. Paragraph 130.

<sup>3</sup> The '538 reference at paragraph 59.

<sup>4</sup> See page 4 of the final Office action.

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and second material being dissimilar materials; that is, having melting temperatures that vary by more than about 40°F, and having dissimilar molecular structures such that upon ultrasonic bonding, the materials are not brought together as one material and typically have macro-phase separation. As such, the "different" materials term as disclosed by '538 is not, and cannot be, equivalent to "dissimilar materials" as required by claim 1.

Specifically, as disclosed in the instant specification, examples of dissimilar materials that can be ultrasonically bonded together utilizing the adhesive composition of claim 1 include: (1) neck-bonded laminates to pattern unbonded materials and (2) spunbond meltblown to woven polyester knit.<sup>5</sup> A close review of the working Examples of the '538 reference, however, shows that the laminated structures made using the adhesive composition of '538 are produced using a first and second material that are similar or compatible. Specifically, the only examples of laminated structures in the '538 reference are made by bonding a polypropylene layer to a polypropylene layer.<sup>6</sup> For example, Example 2 uses laminates comprising a NBL bonded to a NBL. As such, the two outside polypropylene, spunbonded layers of the NBLs are adhered together using the composition of Zhou et al. Similarly, Example 3 uses laminates comprising two polypropylene, spunbonded substrates together and Example 6 uses laminates comprising a NBL bonded to a SBL. Examples 4-5 use laminates comprising a NBL bonded to an outer cover material comprising a polyethylene layer and a polypropylene, spunbonded layer. As noted in '538, in both Examples 4 and 5, the

<sup>5</sup> Instant specification at page 11, paragraph 24.

<sup>6</sup> ... at paragraph 59 and Examples 2-6.

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polypropylene, spunbonded layer of the outer cover material is contacted with the adhesive composition and bonded to the NBL. As such, all of the working examples support a laminated substrate being made by bonding similar first and second materials with the adhesive composition of Zhou et al. Additionally, and importantly, none of the working Examples in '538 utilize ultrasonic energy with any of the laminates.

In the Advisory Action dated June 22, 2006, the Office states that Applicants admit that the '538 reference teaches the bonding of polyethylene and polypropylene and refers to paragraph 59 of '538 and page 3 of Applicants' Letter To Patent And Trademark Office dated June 9, 2006. With all due respect, Applicants have not admitted that '538 teaches the bonding of polyethylene and polypropylene. Specifically, as noted above, '538 teaches bonding a NBL to another NBL and a NBL to an outer cover. While, both the NBL and outer cover comprise polypropylene and polyethylene layers, as noted above, '538 teaches only adhesive bonding the polypropylene layers of the laminated structures together. As such, '538 fails to disclose a laminated structure comprising an adhesive, a first material and a second material, wherein the first and second materials are dissimilar materials that are ultrasonically bonded together.

At best, by stating in one section of the '538 reference that "the other material" to be adhesively connected to the first material may be "different" than the first material and then stating in another section of the reference that the laminate may be subjected to ultrasonic energy, the reference may have disclosed a genus of exposing a hot-melt laminated material including "different" materials to ultrasonic energy to

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form an ultrasonic bond. Even assuming that the limited disclosure of the '538 reference discloses this genus, Applicants' claim 1, which includes the limitation that the materials be "dissimilar" as defined in the specification, defines a species of that genus nowhere disclosed in the reference. As used by the reference, the term "different" includes all materials that are not identical; that is, materials that may have melting points that vary by 1°F, or 5°F, or 15°F, or 30°F; all of which are not covered by claim 1 of Applicants' invention. Additionally, "different" materials as the term is used by the reference could include materials with similar molecular structures. Again, this would include materials specifically excluded by the language of Applicants' claim 1 (the definition of "dissimilar" excludes materials with similar molecular structures). As such, at best, '538 discloses a genus whereas claim 1 discloses a species of that genus.

For example, polybutylene and low density polyethylene are two different thermoplastic materials that are not dissimilar under Applicants' claim 1. Specifically, polybutylene has a melting point of about 255°F and low density polyethylene has a melting point of about 248°F. As such, polybutylene and low density polyethylene fall under the description of the genus of different materials as used in the '538 reference, but are not dissimilar materials as defined in Applicants' claim 1; that is the materials do not have melting points that vary by about 40°F or more.

As stated in M.P.E.P. §2131, a claim is anticipated only if each and every element of the claim is described in the prior art reference. As further stated in MPEP 2131.02, a genus does not anticipate a claim to a species within the genus, unless the

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species is clearly named or well delineated. Applicants assert that the broad generic disclosure for different materials as set forth in '538 fails to clearly provide or delineate materials having melting temperatures that vary by more than about 40°F, and having dissimilar molecular structures such that upon ultrasonic bonding, the materials are not brought together as one material and typically have macro-phase separation, and, as such, cannot anticipate the narrower limitation of dissimilar materials as required by Applicants' claim 1 as the genus limitation set forth in '538 does not clearly name the species limitation set forth in Applicants' claim 1.

As stated above, the '538 reference fails to set forth a sufficient enabling disclosure of ultrasonically bonding a first material and a second material that are dissimilar materials as required by claim 1. As such, the '538 reference fails to teach each and every limitation of instant claim 1. As such, claim 1 is novel and patentable over the cited reference.

Claims 2-10, 13, 16, and 26 depend directly from claim 1. As such, claims 2-10, 13, 16, and 26 are patentable for the same reasons as claim 1 set forth above, as well as for the additional elements they require.

Claim 79 is similar to claim 1 and further requires the adhesive composition to have an open time of less than about 10 minutes. As the '538 reference fails to disclose a first material and a second material that are dissimilar materials and are ultrasonically bonded together, the '538 reference fails to teach each and every limitation of instant claim 79. As such, claim 79 is novel and patentable over the cited reference.

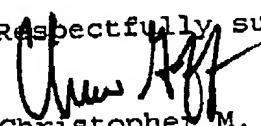
Claims 80-88, 91, 94, and 104 depend directly from claim 79. As such, claims 80-88, 91, 94, and 104 are patentable for

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the same reasons as claim 79 set forth above, as well as for the additional elements they require.

In view of the above, Applicants respectfully request favorable reconsideration and allowance of all pending claims. The Commissioner is hereby authorized to charge any fees in connection with this Amendment A and Response After RCE to Deposit Account Number 19-1345 in the name of Senniger Powers.

Respectfully submitted,

  
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